

I claim as follows:

1. A door skin, comprising:

an exterior side and an interior side for being secured to a frame member;

first and second molded, spaced stiles lying on a first plane;

5 a flat planar portion disposed between said stiles and lying on a second plane spaced from said first plane; and

a first interface portion disposed between and contiguous with said stiles and said flat planar portion.

10 2. The door skin of claim 1, further comprising first and second integral, molded spaced rails lying on a third plane, said third plane intermediate said first and second planes.

15 3. The door skin of claim 2, further comprising edge portions disposed between and contiguous with said stiles and said rails.

4. The door skin of claim 3, wherein said edge portions extend angularly from said stiles to said rails.

20 5. The door skin of claim 2, further comprising a second interface portion disposed between and contiguous with said rails and said flat planar portion.

6. The door skin of claim 5, wherein said second interface portion extends angularly from said rails to said flat planar portion.

5 7. The door skin of claim 1, further comprising a decorative layer secured to said exterior side.

8. The door skin of claim 7, wherein said decorative layer is selected from the group consisting of a veneer, foil, polymeric films, and paper overlays.

10 9. The door skin of claim 8, wherein said decorative layer has a decorative pattern.

10. The door skin of claim 9, wherein said decorative pattern is a wood grain pattern.

15 11. The door skin of claim 10, wherein said wood grain pattern runs parallel to said stiles and perpendicular to said rails.

12. The door skin of claim 2, wherein said rails are recessed from said stiles from between about 0.1 millimeters to about 0.6 millimeters.

20 13. The door skin of claim 2, wherein a veneer panel is inserted to cover said rails.

14. The door skin of claim 9, wherein said decorative layer is applied to a substrate before said substrate is formed into said door skin.

15. The door skin of claim 13, further comprising:

- 5 a second interface disposed between and contiguous with said rails and said planar portion, and
- a third interface disposed between and contiguous with said stiles and said rails.

10 16. The door skin of claim 1, wherein a decorative layer is laminated to said exterior side;

 cracks are disposed within said decorative layer; and

 molding is secured to said decorative layer and covers said cracks.

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16. The door skin of claim 15, wherein said decorative layer has cracks disposed within and contiguous to said second interface area,

 molding is applied to said door skin covering:

 an edge portion of said rails,

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 an edge portion of said planar portion, and

 said second interface area.

17. The door skin of claim 16, wherein said decorative layer has cracks disposed within and contiguous to said third interface area,

molding is applied to said door skin covering:

an edge portion of said rails,

an edge portion of said stiles, and

said third interface area.

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18. The door skin of claim 1, further comprising a decorative layer secured to said exterior side.

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19. The door skin of claim 19, wherein said decorative layer is selected from the group consisting of a veneer, foil, polymeric films, and paper overlays.

20. The door skin of claim 20, wherein said decorative layer has a wood grain pattern.

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21. The door skin of claim 21, wherein said wood grain pattern runs parallel to said stiles.

22. The door skin of claim 1, wherein said interface portion extends angularly relative to said first plane.

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23. The door skin of claim 1, wherein said interface portion includes a curved portion.

24. The door skin of claim 1, wherein said flat planar portion is recessed from said stiles from between about 3 millimeters to about 11 millimeters.

25. The door skin of claim 22, wherein said decorative layer is applied to a substrate before said substrate is formed into said door skin.

5 26. The door skin of claim 25, wherein said decorative layer has cracks disposed within and contiguous with said first interface area,
molding is applied to said door skin covering:
an edge portion of said stiles,
an edge portion of said planar portion, and
10 and said first interface area.

27. The door skin of claim 7, wherein said decorative layer is a veneer laminated to said exterior side; and
a transfer foil is applied to said veneer.

15 28. The door skin of claim 27, wherein said transfer foil includes an adhesive layer adhered to said exterior side and a coating layer overlying said printed layer.

29. A door, comprising:

a peripheral frame having oppositely disposed sides;

first and second door skins, each one of said skins having an exterior side and an interior side for being secured to a frame member, first and second
20 molded, spaced stiles lying on a first plane, first and second molded, spaced rails lying on a second plane, a flat planar portion disposed between said stiles and said rails and lying on a third plane, a first interface portion disposed between and contiguous with said stiles and said flat planar portion, a second interface portion

disposed between and contiguous with said rails and said flat planar portion, and edge portions disposed between and contiguous with said rails and said stiles.

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30. The door of claim 29, wherein said second plane is intermediate said first and third planes.

31. The door of claim 29, wherein said rails are recessed from said stiles from between about 0.1 millimeters to about 0.6 millimeters relative said exterior side.

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32. The door of claim 29, further comprising a first decorative layer secured to said exterior side.

33. The door of claim 32, wherein said first decorative layer is selected from the group consisting of a veneer, foil, polymeric films, and paper overlays.

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34. The door of claim 33, wherein said first decorative layer has a decorative pattern.

35. The door of claim 32, wherein said decorative pattern is a wood grain pattern.

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36. The door of claim 35, wherein said wood grain pattern runs parallel to said stiles.

37. The door of claim 34, further comprising a second decorative layer secured to said first decorative layer covering said rails.

38. The door of claim 37, wherein said second decorative layer does not extend above the plane of said first decorative layer covering said stiles.

5 39. The door of claim 37, wherein said second decorative layer is selected from the group consisting of a veneer, foil, polymeric films, and paper overlays.

40. The door of claim 39, wherein said second decorative layer has a wood grain pattern.

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41. The door of claim 40, wherein said wood grain pattern runs parallel to said rails.

42. The door of claim 29, wherein said edge portions extend angularly from said stiles to said rails.

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43. The door of claim 29, wherein said second interface portion extends angularly from said rails to said flat planar portion.

44. The door of claim 32, wherein said decorative layer is a wood veneer laminated to at least one of said exterior sides, and a transparent transfer foil is adhered to said wood veneer.

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45. The door of claim 44, wherein said transfer foil has a coating layer which is transparent or tinted.

46. A door, comprising:

5 a peripheral frame having oppositely disposed sides;
first and second door skins, each one of said skins having an exterior side and an interior side secured to one of said frame sides, and at least one of said skins formed to have spaced stiles lying on a first plane and a planar portion disposed between said stiles and lying on a plane spaced from the plane of said stiles; and
10 at least two separately formed rails secured to said planar portion at opposite ends thereof.

47. A method of producing a door, comprising the steps of:

15 providing a peripheral door frame having oppositely disposed sides;
providing first and second wood composite blanks having an exterior side and an interior side;
forming at least one of the blanks to have spaced stiles lying on a first plane, spaced rails lying on a second plane, and a planar portion disposed between the stiles and the rails and lying on a third plane, a first interface portion disposed
20 between and contiguous with the stiles and the planar portion, a second interface portion disposed between and contiguous with the rails and the planar portion, and edge portions disposed between and contiguous with the rails and the stiles;
securing the interior sides of the formed blanks to one of the frame sides.

48. A method of producing a door, comprising the steps of:

providing a peripheral door frame having oppositely disposed sides;

providing first and second wood composite blanks having an exterior side

5 and an interior side;

forming at least one of the blanks to have spaced stiles, a planar portion disposed between the stiles and lying on a plane spaced from the plane of the stiles, and an interface portion disposed between and contiguous with the stiles and the planar portion;

10 securing the interior sides of the formed blanks to one of the frame sides;

forming at least two rails, each one of the rails having an exterior surface and an interior surface; and

securing the interior surface of the rails onto the planar portion.

15 49. A method of producing a door skin blank, comprising the steps of:

providing a die set having an upper die spaced from a lower die, the dies creating a forming chamber defining first and second spaced stiles lying on a first plane, and a planar portion lying on a second plane spaced from the first plane and the planar portion being integral with and disposed between the stiles;

20 disposing a substrate between the upper and lower dies; and

compressing the substrate using heat and pressure to form a blank having spaced stiles lying on a first plane, spaced rails lying on a second plane, and a planar portion disposed between the stiles and the rails and lying on a third plane,

a first interface portion disposed between and contiguous with the stiles and the planar portion, a second interface portion disposed between and contiguous with the rails and the planar portion, and edge portions disposed between and contiguous with the rails and the stiles.

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50. A door, comprising:

a peripheral frame having oppositely disposed sides;

first and second laminated blank door skins, each one said first and second door skins being formed from a substrate laminated with a decorative covering before said substrate was reformed into said laminated door skin,

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each one of said laminated blank door skins having an exterior side and an interior side for being secured to a frame member, first and second formed, spaced stiles lying on a first plane, first and second formed, spaced rails lying on a second plane, a flat planar portion disposed between said stiles and said rails and lying on a third plane, a first interface portion disposed between and contiguous with said stiles and said flat planar portion, a second interface portion disposed between and contiguous with said rails and said flat planar portion, and edge portions disposed between and contiguous with said rails and said stiles;

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each one of said door skins having cracks in said decorative coating, said cracks being located within and contiguous to said first and said second interface portions, each one of said door skins having molding to cover said cracks, said molding being attached to said laminated door skins at said first and second interface portions to cover said cracks.

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51. A method of producing a door skin blank, comprising the steps of:

providing a die set having an upper die spaced from a lower die, the dies
creating a forming chamber defining first and second spaced stiles lying on a first
5 plane, and a planar portion lying on a second plane spaced from the first plane and
the planar portion being integral with and disposed between the stiles;

disposing a laminated substrate between the upper and lower dies, the
substrate being laminated with a decorative layer selected from the group
consisting of a veneer, foil, polymeric films, and paper overlays;

10 compressing the substrate using heat and pressure to form a blank having
spaced stiles lying on a first plane, spaced rails lying on a second plane, and a
planar portion disposed between the stiles and the rails and lying on a third plane,
a first interface portion disposed between and contiguous with the stiles and the
planar portion, a second interface portion disposed between and contiguous with
15 the rails and the planar portion, and edge portions disposed between and
contiguous with the rails and the stiles; and

re-moisturizing the substrate at room temperature to a moisture content of
between 8 and 15 percent.

20 52. The method as described in claim 50, further comprising:

inspecting the decorative layer in the first and second interface portions if
cracks are found, applying an ornamental molding to cover the cracks in the first
and second interface portions.

53. The method of forming a molded door skin blank, comprising the steps of:
providing a flat blank comprising a wood composite substrate having a
laminated wood veneer;
positioning the flat blank into a press having upper and lower dies, each of
the dies having a surface configured to form a desired contour;
closing the dies and applying heat and pressure to the flat blank, so that
the flat blank is post-formed into a molded door skin blank; and
adhering to the molded door skin blank a transfer foil having a transparent
coating layer.
54. The method of claim 53, including the step of:
fixedly attaching molding trim to contoured portions of the molded door
skin blank.